

Title (en)
METAL-ORGANIC FRAMEWORKS FOR GAS ADSORPTION

Title (de)
METALL-ORGANISCHE RAHMEN ZUR GASADSORPTION

Title (fr)
STRUCTURES ORGANOMÉTALLIQUES POUR ADSORPTION DE GAZ

Publication
EP 3897921 A1 20211027 (EN)

Application
EP 19897884 A 20191220

Priority

- NZ 2019050163 W 20191220
- AU 2018904882 A 20181221

Abstract (en)
[origin: WO2020130856A1] Disclosed are metal organic frameworks (MOFs) for adsorbing guest species, methods for the separation of gases using the MOFs, and systems comprising the MOFs. The MOFs comprise a plurality of secondary building units (SBUs), each SBU comprising a repeating unit of one metal cation connected to another metal cation via a first moiety of an organic linker; a layer of connected adjacent SBUs in which a second moiety of the linker in a first SBU is connected to a metal cation of an adjacent SBU, and wherein adjacent layers are connected to each other via linker-to-linker bonding interactions

IPC 8 full level
B01D 53/02 (2006.01); **B01D 53/62** (2006.01); **B01J 20/22** (2006.01); **C07C 229/76** (2006.01)

CPC (source: AU EP US)
B01D 53/02 (2013.01 - AU EP); **B01D 53/0462** (2013.01 - US); **B01D 53/047** (2013.01 - US); **B01D 53/485** (2013.01 - AU); **B01D 53/52** (2013.01 - AU); **B01D 53/565** (2013.01 - AU); **B01D 53/62** (2013.01 - AU US); **B01D 53/72** (2013.01 - AU); **B01J 20/226** (2013.01 - AU EP); **B01J 20/2803** (2013.01 - EP); **B01J 20/28061** (2013.01 - EP); **B01J 20/28071** (2013.01 - EP); **B01J 20/2808** (2013.01 - EP); **B01J 20/3425** (2013.01 - EP); **B01J 20/3458** (2013.01 - EP); **B01J 20/3483** (2013.01 - EP); **B01J 20/3491** (2013.01 - EP); **C01B 37/00** (2013.01 - US); **C07C 229/76** (2013.01 - AU); **C07F 15/065** (2013.01 - US); **B01D 2253/204** (2013.01 - AU EP US); **B01D 2253/306** (2013.01 - EP); **B01D 2253/308** (2013.01 - EP); **B01D 2253/311** (2013.01 - EP); **B01D 2256/24** (2013.01 - EP); **B01D 2257/2062** (2013.01 - EP); **B01D 2257/2068** (2013.01 - EP); **B01D 2257/30** (2013.01 - EP); **B01D 2257/304** (2013.01 - AU EP); **B01D 2257/306** (2013.01 - AU); **B01D 2257/402** (2013.01 - EP); **B01D 2257/404** (2013.01 - AU); **B01D 2257/408** (2013.01 - AU EP); **B01D 2257/504** (2013.01 - AU EP US); **B01D 2257/702** (2013.01 - AU); **B01D 2257/7022** (2013.01 - EP); **B01D 2257/7025** (2013.01 - EP); **B01D 2257/708** (2013.01 - EP); **B01D 2257/80** (2013.01 - AU EP); **B01D 2258/02** (2013.01 - EP); **B01D 2258/05** (2013.01 - EP); **B01D 2258/06** (2013.01 - EP); **B01D 2259/40086** (2013.01 - EP); **B01J 8/02** (2013.01 - AU); **B01J 31/1691** (2013.01 - AU); **B01J 2220/46** (2013.01 - AU); **B01J 2220/50** (2013.01 - AU); **B01J 2220/56** (2013.01 - EP); **B01J 2220/58** (2013.01 - EP); **B01J 2540/66** (2013.01 - AU); **B01J 2540/68** (2013.01 - AU); **C07F 13/005** (2013.01 - AU); **C07F 15/045** (2013.01 - AU); **C07F 15/065** (2013.01 - AU); **Y02C 20/10** (2013.01 - EP); **Y02C 20/20** (2013.01 - EP); **Y02C 20/40** (2020.08 - EP)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2020130856 A1 20200625; AU 2019403729 A1 20210617; CA 3123380 A1 20200625; CN 113490537 A 20211008; CN 113490537 B 20230630; EP 3897921 A1 20211027; EP 3897921 A4 20220921; EP 3897921 B1 20240501; EP 3897921 C0 20240501; JP 2022514049 A 20220209; JP 7476203 B2 20240430; US 11905303 B2 20240220; US 2022056064 A1 20220224

DOCDB simple family (application)
NZ 2019050163 W 20191220; AU 2019403729 A 20191220; CA 3123380 A 20191220; CN 201980092611 A 20191220; EP 19897884 A 20191220; JP 2021535303 A 20191220; US 201917416583 A 20191220